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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,696	01/18/2002	Douglas W. Johnson	10290US01	3813

7590 01/03/2005

Attention: Eric D. Levinson  
Imation Corp.  
Legal Affairs  
P.O Box 64898  
St. Paul, MN 55164-0898

EXAMINER

OLSON, JASON C

ART UNIT PAPER NUMBER

2651

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/052,696

Applicant(s)

JOHNSON, DOUGLAS W.

Examiner

Jason C Olson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

This office action is in response to amendment filed on 09/14/2004.

The allowable subject matter of claims 10, 13-15, 17-21, 25, and 29-34 is withdrawn.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-27 and 29-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Albrecht et al. (US 5,930,065), referred to as Albrecht.

Regarding claim 1, Albrecht teaches a linear recording medium, (see figure 1, item 20) comprising a pattern of time based servo transitions (see col. 4, ln. 31-32) including first servo transitions non-parallel to second servo transition (see figure 4, the first and second servo transitions are non-parallel), wherein the first servo transitions define a series of parallel servo transitions having modulated distances between parallel servo transitions as a function location of the first servo transitions on the medium (see col. 6, ln. 13-16 and figure 4, it can be seen that the distances between the first servo transitions are shifted or modulated).

Regarding claim 2, Albrecht teaches the adjacent parallel servo transitions are immediately adjacent (see figure 4).

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Regarding claims 3 and 4, Albrecht teaches the linear recording medium is a magnetic tape recording medium (see col. 2, ln. 27-28).

Regarding claims 5 and 6: claims 5 and 6 have limitations similar to those treated in the above rejection(s), and are met by the references as discussed above. Claim 5 however also recites the following limitations as taught by Albrecht: a servo read head connected to a drive in which the drive is designed to expect essentially no modulated distance between adjacent parallel servo transitions on the medium (see col. 5, ln. 1-15; it is interpreted by the examiner that the drive expects essentially no modulated distances between the servo transitions).

Regarding claim 7, Albrecht teaches the speed on the linear recording medium relative to the servo read head is constant (see col. 7, ln. 40-44 and 55-59; It is interpreted by the examiner that because Albrecht teaches an embodiment using two cheverons per group, the drive speed is constant to accommodate the pattern).

Regarding claims 8 and 9: method claims 8 and 9 are drawn to the method of using the corresponding apparatus claimed in claims 1, 2, 5, and 6. Therefore method claims 8 and 9 correspond to apparatus claims 1, 2, 5, and 6 and are rejected for the same reasons of anticipation as used above.

Regarding claim 10, Albrecht teaches adjusting clock timing in a servo write head timing circuit (see col. 14, ln. 32-44).

Regarding claim 11, Albrecht teaches adjusting position of the linear recording medium relative to a fixed servo write head (see col. 14, ln. 32-34).

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Regarding claim 12, Albrecht teaches adjusting position of a servo write head relative to the linear recording medium (see col. 14, ln. 53-55; it is interpreted by the position of the head had to be adjusted to write the duplicate servo tracks).

Regarding claims 13-15, Albrecht teaches generating position error signal in step response pattern, a pulse response pattern, or a frequency response pattern (see col. 7, ln. 64-col. 8, ln. 3 and col. 8, ln. 49-52; it is interpreted by the examiner that by encoding "0"s and "1"s, a step response, a pulse pattern, or a frequency pattern can be created in line with what is described by the applicant in the instantaneous specification on page 6, lines 13-22).

Regarding claims 16, 17, and 19-21: Claims 16, 17, and 19-21 have limitations similar to those treated in the above rejection(s), and are met by the references as discussed above.

Regarding claim 18: method claim 18 is drawn to the method of using the corresponding apparatus claimed in claim 7. Therefore method claim 18 corresponds to apparatus claim 7 and is rejected for the same reasons of anticipation as used above

Regarding claims 22-27: Claims 22-27 have limitations similar to those treated in the above rejection(s), and are met by the references as discussed above. Claim 22 however also recites the following limitations as taught by Albrecht: repeating the writing and modulating steps at a second traverse location (see col. 14, ln. 33-45 and figure 8; it is interpreted by the examiner that modulated chevrons are written at a second traverse location).

Regarding claims 29-34: Claims 29-34 have limitations similar to those treated in the above rejection(s), and are met by the references as discussed above. Claim 29 however also recites the following limitations as taught by Albrecht: comparing the position error signal to an expected value (see col. 5, ln. 1-18; it is interpreted by the examiner that the position signal or

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position error signal that sent to the servo controller is compared to an expected value from which a servo controller signal is generated and provided to the servo positioning mechanism).

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Albrecht and in view of Baca et al. (US 5,574,602), referred to as Baca.

Regarding claim 28, Albrecht teaches all the limitations of claim 22. Albrecht further teaches reading position error signal at each transverse location with a recording drive (see col. 5, ln. 1-18) but fails to teach disabling a data writer function in the drive if the position error signal exceeds a stop write limit. However, Baca is relied upon to disabling a data writer function in the drive if the position error signal exceeds a stop write limit (see col. 5, ln. 39-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon reading and writing operations of Albrecht by applying the teaching of stopping recording when the position of the head exceeds a suitable threshold as taught by Baca for the purpose of eliminating the writing or recording of data at such an off-track position that it degrades the quality and reliability of the data written onto the linear tape medium.

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***Response to Arguments***

Applicant's arguments with respect to claims 1-9, 11, 12, 16, 22-24, 26, and 27 have been considered but are moot in view of the new ground(s) of rejection. Claims 1-27 and 29-34 have been rejected under U.S.C 102(b) as being anticipated by Albrecht et al. (US 5,930,065). Claim 28 is rejected under U.S.C 103(a) as being obvious in view of Albrecht et al. and Baca et al. (US 5,574,602).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason C Olson whose telephone number is 703.305.8325. The examiner can normally be reached on Monday thru Thursday 7:30-5:30; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (703)308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCO

December 20, 2004

  
**SINH TRAN**  
**SUPERVISORY PATENT EXAMINER**